

# Campaign for Evidence-Based Regulation of Dangerous Dogs - Draft Report

## Executive Summary

This report is to help the Environment, Food and Rural Affairs Committee scrutinise government as they legislate to ban American Bully-type dogs. We enclose a breed history for the American Bully, detail on the statistics behind the recent rise in dog attack fatalities, and further evidence around the science of breed-based differences that result in differential public health risk.

This report is a followup to a previous joint report, separately provided to the Committee as evidence.

## Our Key Asks

Ban the American Bully-type dog, by defining the breed and adding it to Section 1 of the Dangerous Dogs Act.

Ensure American Bully-type dogs are covered by S1 of the DDA while protecting owners of popular British bull breeds, by limiting breed-based exclusions of dogs from S1 of the DDA for dogs born after the ban is imposed to pure- and cross- bred dogs recognised by the Kennel Club as at 1st January 2023.

Create a public record of dog attacks which cause severe injuries and fatalities by recording dog breed, age and gender and circumstances of attack, to track the effectiveness of legislation and provide an early warning for any emergence of new threats to public health.

Standardise and centralise reporting of S1 and S3 seizures by police, including more standardised reporting of dog breed and age and circumstances of seizure

Make better use of genetic testing of dangerous and aggressive dogs to help the UK lead the world in both breeding and health sciences for pets.

To curtail breeding of banned dogs or breeding to create new potentially dangerous breeds, there must be future discussion on laws around importing of dogs and dog semen - including whether strict controls or complete proscription is necessary.

# The American Bully: Brief History

The American Bully is a crossbreed of the American Pit Bull Terrier and American Staffordshire Bull Terrier, as demonstrated by DNA testing and through openly accessible breed histories published by Bully kennel clubs (e.g. United Kennel Club, hereafter UKC, and American Bully Kennel Club, hereafter ABKC). Our study of breed lineage demonstrates it is intrinsically a larger Pit Bull, with the ancestry of every American Bully-type dog in the UK tracing back to these two types of pit bull.<sup>1</sup> Some suggest that Mastiff, Bulldogs and other breeds may have been bred in, but “papering” (the practice of forging pedigree papers for banned or cross-breed dogs) prevents experts from confirming this.

The breed was introduced to the UK sometime during the 2010s, and was first reported in mainstream media in 2017, when four American Bullies escaped the garden of a breeder and mauled a toddler nearly to death in Dingle.<sup>2</sup> The breed remains sufficiently rare that it is not recognised by the UK’s Kennel Club or most canine insurance providers.<sup>3</sup>

The popularity of the American Bully-type dog is a relatively new trend. As recently as 2017, an ITV survey did not include the breed inside the top 100 on Britain’s favourite dog breeds<sup>4</sup>. Although the number of American Bully-type dogs in the UK has risen rapidly since 2020, only 2% of puppies sold online are American Bully-types. As such, we estimate that they remain less than 1% of the population of dogs, as described later.

The primary objective in breeding American Bully-types became to breed larger and more muscular dogs or to breed in physical traits, such as colour, to have a distinct selling point.

Whereas typical pit bull stock, including that from which the American Bully arises, was bred from dogs usually weighing between 16 kg and 29 kg, breeding for bulk and musculature mean that American Bully type dogs can now weigh up to 75kg. Even the most skilled handlers often struggle to control such large and powerful dogs; three of the recorded fatalities from American Bully-types have been from professional dog handlers, one of them a trainer with a decades-long career in rehabilitating rescued dogs. The use of prong collars, slip leads and other dog training tools is widespread amongst owners.

Our research shows a significant number of these dogs come from lines with a history of producing human-aggressive progeny in the United States. Despite this lineage, such dogs are extensively used for breeding in the UK. Additionally, a large portion of these dogs’ ancestry includes champion dogs bred for fighting. Although dog fighting was made illegal in the United States in the 1970s, it was not widely enforced until the turn of the century. Due to immaculate recordkeeping of fighting dogs, we have been able to trace dogs’ pedigrees to pit bulls active in dog fighting in the 1990s.<sup>5</sup>

The breed's genetic diversity is relatively limited due to excessive inbreeding. All current American Bullies are descendants of a handful of US breeders active in the early 1990s.

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<sup>1</sup> <https://bullywatch.link/breed-genetics/>

<sup>2</sup> <https://www.dailymail.co.uk/news/article-4576490/amp/Owner-dogs-mauled-two-year-old.html>

<sup>3</sup> <https://www.thekennelclub.org.uk/media-centre/breed-registration-statistics/>

<sup>4</sup>

<https://www.countryliving.com/uk/wildlife/dog-breeds/g33/itv-show-britains-favourite-dogs-top-100-dog-breeds/>

<sup>5</sup> <https://bullywatch.link/breed-genetics/>

This has resulted in a genetic bottleneck. This was narrowed again when the American Bully was introduced to the UK in the mid 2010s, resulting in an even smaller pool of genetic material. Most American Bully pedigrees show evidence of inbreeding, with certain influential progenitors displaying an inbreeding coefficient of 40% or higher. This increases health risks to dogs, including possible neurological issues. According to the BVA, the base standard for the XL Bully is to have mild hip dysplasia<sup>6</sup>.

The breed has increased in popularity since 2019, yet still comprises a small but rapidly growing minority of dogs. Approximately 2% of puppies for sale on a variety of online marketplaces are for the American Bully breed. This current level, coupled with its near-zero prevalence only a few years ago and its very significant rise in popularity, makes it likely that only around 1% of owned dogs in the UK are American Bully-types and a significantly smaller proportion are 2019 (see below for more detail).

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<sup>6</sup> <https://www.bva.co.uk/media/4891/hip-breed-specific-statistics-2022.pdf>

# Recommendations for Guidance and Data Collection

## Ensuring breed-based exemptions for dogs matching the type guidance S1 of the Dangerous Dogs Act are robust

Defining a breed type to ban dangerous dogs while ensuring appropriate exemptions for beloved British dog breeds such as the Staffordshire Terrier is a necessary task, particularly as many owners and ethical breeders of dogs of other breeds may be concerned that a definition may inadvertently cover their breed of dog. This is a particular concern for owners of Staffordshire Bull Terriers, a popular and long-standing British dog breed which shares some of the characteristics of the Pit Bull and bully-type dogs.

On the converse, a too-narrow description of a particular dangerous breed may allow the owners of potentially dangerous dogs to once again find loopholes in the regulation to evade coverage of their dogs. In the case of the American Bully in particular, for-profit American kennel clubs have allowed registration of pitbull-type dogs as bully breeds without a stringent inspection process<sup>7</sup>.

One promising avenue to strike a balance between effective guidance that robustly covers American Bully-type dogs, while protecting the owners and ethical breeders of popular British breeds, would be to update the guidance covering breed-based exclusions for dogs matching a type banned under S1 of the DDA. Updated guidance could be used to limit breed-based exclusions **only** to pure- and cross- bred dogs which are from one of the Kennel Club-recognised breeds recognised at 1st January 2023 for dogs born after the ban is imposed.

## ‘Dog Bites’ are an Unsuitable Measure for Public Health

Current data-gathering focuses chiefly upon broad analysis of “dog bites”. This measure seriously fails to account for differing severities. Significantly, this measure elides the difference between more serious dog bites that cause the loss of limb or fatality, versus warning bites and nips resulting in minor lacerations. For this reason, a simple measure of bites fails to capture sufficient nuance for accurate public health analysis.

We propose data gathering primarily focuses on hospitalisations and fatalities (both in humans and pets), with a breakdown by breed. A data set focused on more severe injuries would better reflect the concerns the police and the public have regarding analysis of serious incidents, while providing additional information to doctors and veterinarians.

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<sup>7</sup> UKC allows transfers of dogs from one breed to another for the payment of \$30 requiring only self certification:  
<https://www.ukcdogs.com/docs/registration-forms/breed-transfer-american-bully.pdf>; transfer of UKC registration to ABKC requires no more than further self-certification and a further \$30 payment  
<https://abkcdogs.net/registration/>

## Improved and Centralised Statistics on Dog Attacks

Tracking dog attacks under the current UK system is a challenging exercise, given its fragmentation and unreliability. Researchers frequently combine multiple data sets from sources of varying reliability, including media reports<sup>8</sup>, hospital records,<sup>9</sup> and Wikipedia.<sup>10</sup> The National Police Chief's Council had identified qualitatively the emergence of American Bully type dogs as a potential threat to public health as far back as 2017<sup>11</sup>, but in the absence of robust data, this emerging threat to public health was ignored.

We suggest the following enhancements to data gathering, culminating in an annualised centralised report on *dog attacks resulting in hospitalisations or fatalities*, as follows:

- Submission of coroner reports for all deaths due to dog attacks to DEFRA, with standardised fields for dog characteristics such as breed, age, gender, previous behaviour and breeder data; appropriate owner and victim characteristics; and attack characteristics such as place of attack, whether the dog was on a lead, etc
- Updating of police guidelines to ensure standardised data on S1 and S3 seizures by police, to include dog characteristics such as breed, age and gender, plus circumstances of seizure
- Include documentation of all conducted procedures such as dog typing or behaviour analysis
- Submission of these data on S1 and S3 seizures by police to a centralised database, to allow for early warning of breed-specific rises in attacks on humans, coupled with partnerships with pet microchip registries to track the whether population of potentially dangerous dogs is changing over time
- Tracking of dog bite-related hospitalisations as an annually-released national statistic to enable study of changing prevalence over time

## Improved Use of Genetics and Education on Dog Breed Origins

With the advent of newer genetic testing and technology in both commercial<sup>12</sup> and laboratory tests, there is potential to use DNA technology to either provide positive identification of an

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<sup>8</sup> V. Tamara Montrose, Keith Squibb, Susan Hazel, Lori R. Kogan, James A. Oxley, Dog bites dog: The use of news media articles to investigate dog-on-dog aggression, *Journal of Veterinary Behavior*, Volume 40, 2020, Pages 7-15, ISSN 1558-7878, <https://doi.org/10.1016/j.jveb.2020.08.002>.

<sup>9</sup> Sirkku Sarenbo, P. Andreas Svensson, Bitten or struck by dog: A rising number of fatalities in Europe, 1995–2016, *Forensic Science International*, Volume 318, 2021, 110592, ISSN 0379-0738, <https://doi.org/10.1016/j.forsciint.2020.110592>.

<sup>10</sup> APDAWG presentation, 15th November 2022 - Dr Carrie Westgarth, University of Liverpool.

<sup>11</sup> Dangerous Dogs: Breed Specific Legislation inquiry, NPCC Written Evidence 28 June 2018 <https://committees.parliament.uk/writtenevidence/92183/html/>

<sup>12</sup> Wisdom Panel Blog. (2021, August 9). Decoding the bully breeds: How we now test for American Pit Bull Terrier. Retrieved October 8, 2023, from <https://www.wisdompanel.com/en-us/blog/detecting-american-pit-bull-terrier>

individual dog,<sup>13,14</sup> or to identify unknown dogs by phenotypic traits.<sup>15</sup> By including DNA profiles in a reporting system for dogs seized under S3, researchers will be better prepared to conduct comprehensive analysis such as GWAS studies,<sup>16</sup> which could elucidate the genetic factors associated with potential for harm.

We recommend all dogs which cause death or severe injury undergo DNA testing with data submitted to a central database available to researchers, as well as those which are seized under S3 of the Dangerous Dogs Act. This has the following benefits:

- Providing a clear identification of breed for dogs involved in the most severe attacks to the Secretary of State, Police and the Department for Environment Food and Rural Affairs will allow them to track more precisely which breeds are disproportionately involved in the most severe attacks and better spot emerging threats to public safety
- Making available genetic data for dogs involved in the most severe attacks, will allow breeders to ensure they are genuinely breeding dogs which are more docile and less likely to cause severe injury or death
- Giving researchers a statistically robust sample of genetic codes for dogs which exhibit severe aggressive behaviour towards humans and other dogs will allow them to get a clear picture of which specific genetic characteristics are causally associated with aggressive behaviour.

This method does require knowledge of the dog-types under investigation, and dog typing will still be required for further confidence in categorisation. For example, American Bully under DNA testing may appear to be a “Pitbull-Am Staff” cross, perhaps with Mastiff and Bulldog, and may thus be ruled as a “Pitbull-cross”. This would not be incorrect (American Bullies are Pitbull-crosses) but would have the effect of artificially reducing or removing American Bullies all attack figures.

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<sup>13</sup> Somnay V, Duong T, Tsao RY, Prahlow JA. Crime Scene Analysis Through DNA Testing of Canine Feces-A Case Report. *Acad Forensic Pathol.* 2020 Mar;10(1):56-61. doi: [10.1177/1925362120944743](https://doi.org/10.1177/1925362120944743). Epub 2020 Sep 14. PMID: 32983294; PMCID: PMC7495676.

<sup>14</sup> Zhang BW, Li M, Ma LC, Wei FW. A widely applicable protocol for DNA isolation from fecal samples. *Biochem Genet.* 2006 Dec;44(11-12):503-12. doi: [10.1007/s10528-006-9050-1](https://doi.org/10.1007/s10528-006-9050-1). PMID: 17094033.

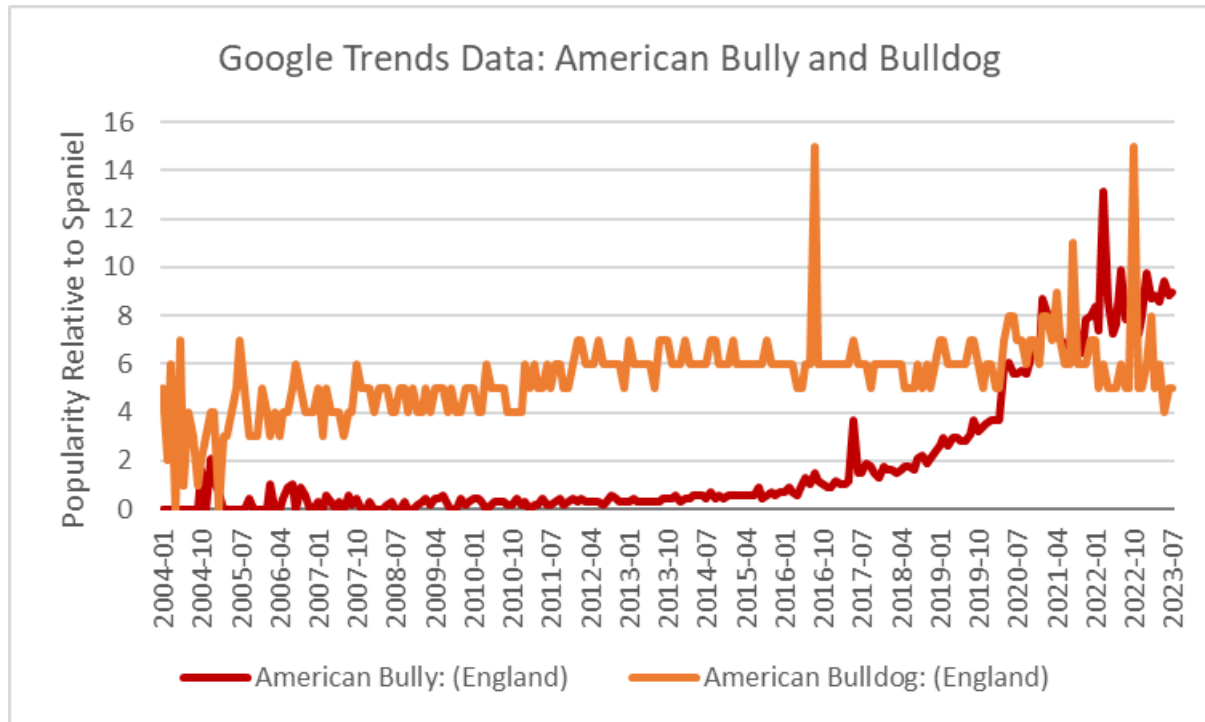
<sup>15</sup> Berger, C.; Heinrich, J.; Berger, B.; Hecht, W.; Parson, W.; on behalf of CaDNAP. Towards Forensic DNA Phenotyping for Predicting Visible Traits in Dogs. *Genes* 2021, 12, 908. <https://doi.org/10.3390/genes12060908>

<sup>16</sup> Shan S, Xu F and Brenig B (2021) Genome-Wide Association Studies Reveal Neurological Genes for Dog Herding, Predation, Temperament, and Trainability Traits. *Front. Vet. Sci.* 8:693290. doi: [10.3389/fvets.2021.693290](https://doi.org/10.3389/fvets.2021.693290)

# Analysing Relative Risk of Different Dog Types

## Estimating the Prevalence of Dog Breeds

Estimating prevalence for American Bully type dogs is complicated. Google Trends data,<sup>17</sup> which has been used as a proxy for pet buying behaviour,<sup>18,19,20</sup> shows that there has been a sharp rise in interest in the breed. Selecting the “Pet” category to remove the effect of news articles on the breed, we see with popularity double between 2020 and the start of 2022, to a level almost 5x higher than 2018:



General interest in the breed is at a much lower level than other popular breeds, which saw a marked increase in popularity which has subsequently receded:

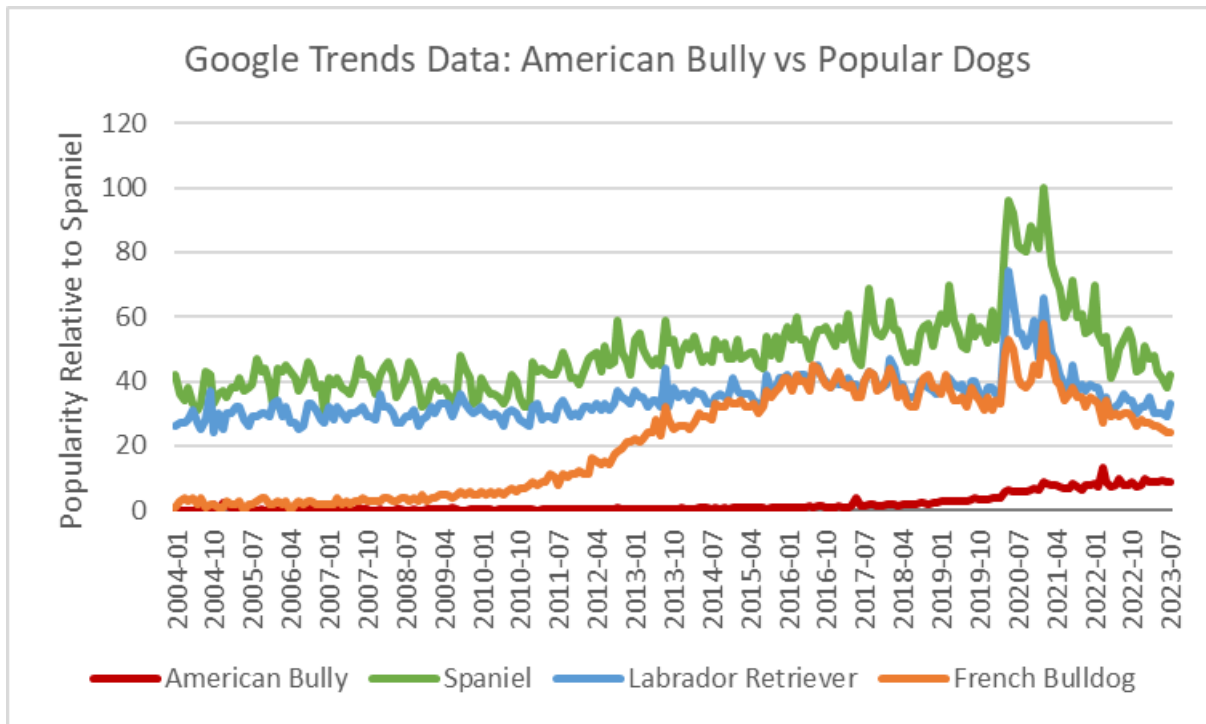
<sup>17</sup> Google Trends. (2023, October 8). Google Trends. <https://trends.google.com/>, data available from CEBRDD on request.

<sup>18</sup> Christie Sietou, Societal interest in puppies and the Covid-19 pandemic: A google trends analysis, *Preventive Veterinary Medicine*, Volume 196, 2021, 105496, ISSN 0167-5877, <https://doi.org/10.1016/j.prevetmed.2021.105496>.

<sup>19</sup> Ho, J., Hussain, S., & Sparagano, O. (2021). Did the COVID-19 pandemic spark a public interest in pet adoption?. *Frontiers in Veterinary Science*, 8, 647308. <https://doi.org/10.3389/fvets.2021.647308>.

<sup>20</sup> Valdez, J.W. Using Google Trends to Determine Current, Past, and Future Trends in the Reptile Pet Trade. *Animals* 2021, 11, 676. <https://doi.org/10.3390/ani11030676>.





Due to its popularity being relatively recent, we see that unlike with other dogs, the American Bully will be a much higher proportion of the current sales than its proportion of the dog population. Assuming a dog life expectancy of 10 years, average historic sales are about 1.44x higher than the last 3 months of sales across other dog breeds, whereas average historic sales are 0.39x current sales for the American Bully. As a result, the prevalence of American Bully-type dogs within the population is likely 3.65x higher than their current proportion of sales.

Pets4Homes.com, the UK’s leading online pet store, currently lists 787 American Bully and 110 “American Bulldog” puppies for sale.<sup>21</sup> This is 4.58% of the 19578 puppies currently for sale. This would imply a prevalence of 1.25% American Bully type at current, including American Bulldogs, with a lower prevalence for American Bullies alone. Assuming buying was in line with interest, prevalence would have averaged 1.06% in 2022 and 0.57% in 2021.

Royal Veterinary College (RVC) analysis of records retrieved from the Veterinary Companion Animal Surveillance System (VetCompass™)<sup>22</sup> for dogs receiving primary care in 2019 shows within a dataset of 2.24m dogs receiving primary care, 8,633 (0.39%) were recorded as American Bulldogs while only 94 were recorded as American Bully breeds<sup>23</sup>. Care should be taken in over-extrapolating from these numbers, as they could indicate that veterinary professionals were unaware of the existence of the breed, in which case American Bullies

<sup>21</sup> Pets4Homes.com (2023). Pets4Homes. <https://www.pets4homes.co.uk/>. Accessed 8th October 2023. Similar data accessed in late July 2023 had a lower proportion of dogs being sold as American Bully type at 2%.

<sup>22</sup> Royal Veterinary College (2023) Overview. <https://www.rvc.ac.uk/vetcompass/about/overview>. 8 October 2023.

<sup>23</sup> O’Neill DG, McMillan KM, Church DB, Brodbelt DC (2023) Dog breeds and conformations in the UK in 2019: VetCompass canine demography and some consequent welfare implications. PLOS ONE 18(7): e0288081. <https://doi.org/10.1371/journal.pone.0288081>



may have been misclassified as other breeds or described as non-designer cross-breeds. Regardless, this data is consistent with a very low prevalence in 2019 and a strong rise in popularity after 2020.

## The Challenges of Categorising Attacks By Breed

To understand the relative risk of a fatal attack (or other type of incident) between different types of dogs involves three steps:

- Firstly, choosing how to differentiate between types of dog. Any definition of type or breed should map onto commonly-shared understandings of breed types.
- Secondly, attributing hospitalisations and fatalities (or other incidents) to the various types of dogs. The quality of this attribution depends on the choices in the previous step, relying on the police, media, experts or coroners sharing the same definition. Where analysts are unable to determine the breed or type of dog, datapoints should be excluded.
- Thirdly, using the classification from the previous step, estimating the varying prevalence of each type of dog within the canine population.

Once these groups have been defined, the estimation of relative risk is a trivial calculation relying only on the quality of the definitions used and the numbers generated above.

Currently, **no central database of fatalities by breed exists**, although a number of charities and academics maintain their own databases. However, the use of statistics based on police- and media-reported accounts of dog bite fatalities is a well-accepted research approach.<sup>24</sup> The RSPCA has historically maintained a database of fatalities, including breed statistics<sup>25</sup>, which have been used in their campaigns and in submissions to Parliament<sup>26</sup>. This approach is agreed upon by all sides of the breed-ban debate, with Dr Carrie Westgarth, a leading dog bite academic, having used data sourced from Wikipedia in presentations to parliamentarians.<sup>27</sup> CEBRDD assembled a dataset of media-reported fatalities based on Wikipedia data<sup>28</sup> and the previously-mentioned RSPCA dataset<sup>29</sup>, verifying all entries by reviewing underlying media reports and publicly available information.

Due to choices around how police, coroners and others gather and publicise data, different observers may come up with slightly different estimates of deaths for each breed, and as data changes, estimates may have to be revised.

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<sup>24</sup> V. Tamara Montrose, Keith Squibb, Susan Hazel, Lori R. Kogan, James A. Oxley, Dog bites dog: The use of news media articles to investigate dog-on-dog aggression, *Journal of Veterinary Behavior*, Volume 40, 2020, Pages 7-15, ISSN 1558-7878, <https://doi.org/10.1016/j.jveb.2020.08.002>.

<sup>25</sup> RSPCA. 2018, June. Supplementary written evidence submitted by the RSPCA (DDL0466). <https://committees.parliament.uk/writtenevidence/92337/html/>, 3 October 2023.

<sup>26</sup> UK Parliament. Dangerous Dogs: Breed Specific Legislation Inquiry - Committees - UK. <https://committees.parliament.uk/work/2568/dangerous-dogs-breed-specific-legislation-inquiry/publications/>, 3 October 2023.

<sup>27</sup> APDAWG presentation, 15th November 2022 - Dr Carrie Westgarth, University of Liverpool.

<sup>28</sup> Wikipedia. 5 October 2023. List of fatal dog attacks in the United Kingdom. [https://en.wikipedia.org/wiki/List\\_of\\_fatal\\_dog\\_attacks\\_in\\_the\\_United\\_Kingdom](https://en.wikipedia.org/wiki/List_of_fatal_dog_attacks_in_the_United_Kingdom), 8 October 2023.

<sup>29</sup> RSPCA. 2018, June. Supplementary written evidence submitted by the RSPCA (DDL0466). <https://committees.parliament.uk/writtenevidence/92337/html/>, 3 October 2023.

Prevailing legislation in the UK is not breed-based but type-based; dogs are differentiated by broad characteristics, not by the application of a particular breed standard. As such, groupings used in press, police and judicial evidence will often be based on dog types, instead of breeds. Additionally, as the UK's type-based regulation includes cross-bred dogs, groupings should include cross-breeds as applicable.

Although different choices of breed-groupings may reduce the **precision** of the estimate, where there is a very large relative risk difference, it does not invalidate the **accuracy** of a conclusion that particular breeds or types pose a higher relative risk. While people may struggle to differentiate between precise cross-breeds of specific large bull breeds, the public are much less likely to misidentify bull-type breeds from popular breed types like spaniels, labradors and other non-bull breeds.

## CEBRDD Estimate Of Relative Risk

### How We and Other Bodies Define “American Bully Type Dogs”

In our initial analysis defining American Bully-type dogs, we have followed the convention used by the Dogs Trust, Britain's largest dog welfare charity, when rehoming dogs. They group American Bulldogs with American Bullies in a single group, which we have referred to as “American Bully-type dogs”.

We believe this is the approach taken by the police in incidents, particularly before the recent trend in deaths attributable to the American Bully became widely known. For example, the dog which caused the death of Jack Lis was classified by the coroner as an American Bulldog<sup>30</sup>, but described as an XL Bully at the trial of the owner<sup>31</sup>.

Indeed, academic work as recent as 15th August 2023, by leading experts in the field Professor Carri Westgarth and Dr John Tulloch, inaccurately claimed that the American Bully XL was a new ‘sub-breed of the American Bulldog’.<sup>32</sup>

Additionally, private companies in the US that register these dogs – documentation from which is currently accepted as proof these dogs should be excluded from coverage of S1 of the Dangerous Dogs Act – are willing to provide re-register American Pit Bull Terriers and similar dogs as American Bullies or even American Bulldogs, with no more than self-certification of behavioural characteristics and a photo of the dog.<sup>33</sup>

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<sup>30</sup> 2021, December 1. Dog that killed boy in Caerphilly was not an illegal breed. BBC. <https://www.bbc.co.uk/news/uk-wales-59495133>, 3 October 2023.

<sup>31</sup> 2022, June 10. Jack Lis: Man and woman jailed after 10-year-old boy mauled to death by XL bully dog near Caerphilly. Sky News. <https://news.sky.com/story/jack-lis-man-and-woman-jailed-after-10-year-old-boy-mauled-to-death-by-xl-bully-dog-near-caerphilly-12631401>, 3 October 2023.

<sup>32</sup> 2023, August 15, Dog Attacks on Adults Are Rising. Dr Carri Westgarth & <https://www.liverpool.ac.uk/life-sciences/news/articles/dog-attacks-on-adults-are-rising-but-science-shows-its-wrong-to-blame-breeds/>

<sup>33</sup> Diver, Tony. 2023, September 17. Pit bull semen from America used to breed XL Bullies in UK. The Telegraph.

## Counting Dog Fatalities By Breed

Since the start of 2021 until 4th October 2023, our data show 22 deaths. Of these, 12 have been reported as involving American Bullies, and 3 as involving American Bulldogs. Of the remaining fatalities, one is unknown. As such, under our definition, for attacks for which classification is possible, 15/21 (71%) were caused by American Bully-type dogs. Of these, 3 were in 2021, 6 were in 2022 and 6 were in the first 2023 to date.

An alternative methodology would exclude American Bulldogs from the count of American Bully-type dogs, counting only those where there has been no question raised by police or media as to whether a fatality has been caused specifically by a pure-bred Bully XL. This methodology excludes the fatalities of:

- Natasha Johnson, who described the dog who killed her as a Bully XL, but where one typing expert described the dog as an American Pit Bull Terrier
- Jack Lis, where the dog involved was named by the coroner as an American Bulldog but by all other sources as a Bully XL
- Wayne Stevens, where family members of the victim and dog owner have referred to the dog as a Bully XL/Cane Corso cross
- Shirley Patrick, where the dog was a Bully XL/Cane Corso cross-breed
- Joanne Robinson, where despite the victim, owner and vendor believing the dog to be a Bully XL, one dog typing expert said the dog was more likely to be a Cane Corso or Italian Mastiff

Using this methodology, 9/22 deaths since 2021 have been caused by Bully XL dogs, with a further 6/22 reported as Bully XLs or American Bulldogs, and one unknown. In other words, even under this most restrictive methodology, including all unknowns in the denominator but not in the numerator, 43% of deaths where breed was known were caused by pure-bred Bully XLs and a further 29% caused by related breeds; 29% were known to be caused by unrelated breeds. This number is arrived through inconsistencies with previous practice in this area, and is artificially low due to the inclusion of unknowns in the denominator but not the numerator. It is, in other words, the lowest possible estimate for fatalities directly caused by Bully XLs since 2021 and yet *still* finds Bully XLs to be dramatically, and uniquely, overrepresented in the fatality figures.

## Calculating Relative Risks for Dog Fatalities

When calculating relative risks, there are two methodologies. We can compare the relative risks within-period, by comparing per capita death rates between different breeds. Alternatively, we can compare between absolute fatality numbers directly.

Using the fatality count and prevalence for our American Bully-type definition, we see 71% of deaths have been caused by 1% of the canine population, while a further 29% of deaths have come from the remaining 99% of the canine population. Using simple probabilistic

modelling, **it implies that the recent fatality rate of the American Bully-type population is 247.5x that of the rest of the canine population.**<sup>34</sup>

A more - arguably overly - conservative estimate would compare the death rates from pure-bred Bully XLs versus those dogs known to be unrelated to the breed, and using the broad American Bully-type prevalence estimate, the fatality rate purely from Bully XLs is 148.5x that of the population of dogs entirely unrelated to the American Bully and Bulldog<sup>35</sup>

Alternatively, we can compare across different breeds by looking at how annual reported death rates vary by breed. Over the three years since 2021, we have had an annualised 5.4 deaths per year from American Bully-type dogs, comprising an estimated 1% of the canine population. Extrapolating to the entire canine population, this would imply 540 annual deaths from dog attacks if all dogs were this breed.

Comparing this to deaths from other breeds in the period 2010-current, we see 12 deaths from Staffordshire Bull Terriers (0.87 annual deaths) from an estimated 6.2% of the canine population<sup>36</sup>, i.e. 14 annual deaths if they comprised the entire canine population.

Over the same period, 5 deaths (0.36 per year) were caused by dogs described as an American Bulldog. Using the 0.58% prevalence<sup>37</sup> in 2019 estimated from veterinarian data, this equates to 62 deaths per year if this breed comprised the entire canine population. 5 deaths were caused by Pit Bull Terriers, although we cannot rely on estimates of the prevalence of this banned breed in the UK.

No other breed in the sample caused more than 3 deaths over this period, with the remaining breeds causing a total 14 deaths (1.02 annual deaths) over the period.

Using these figures, it would appear that American Bully-type dogs are almost 40 times as lethal as the Staffordshire Bull Terrier, previously the most lethal popular domestic dog breed in the UK.

During the pandemic restrictions, only a temporary increase in attacks was observed.<sup>38</sup> Despite concerns that temperament resulting from poor socialisation of pets during the pandemic would be harmful, we find little reason to be overly concerned by this, as the effect on a dog's temperament is expected to be minimal and recover quickly to baseline after the release of pandemic restrictions.<sup>39</sup>

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<sup>34</sup> Fatalities from Subgroup / Fatalities outside Subgroup \* Population Outside Subgroup / Population of Subgroup:  $15 / 6 * 99 / 1 = 247.5$

<sup>35</sup> Ibid:  $9 / 6 * 99 / 1 = 148.5$

<sup>36</sup> O'Neill et al, 2023, takes the purebred prevalence of 4.2% and adjusts to assume representation of the breed is the same among the parents of non-designer cross-breeds - i.e. purebreed prevalence \*  $(1 + 2 * \text{crossbreed prevalence}) = 4.20 (1 + 2 * 0.2397)$

<sup>37</sup> As above, purebred prevalence of 0.39% equates to 0.58% for pure- and cross-bred dogs

<sup>38</sup> Tulloch JSP, Minford S, Pimblett V, *et al.* Paediatric emergency department dog bite attendance during the COVID-19 pandemic: an audit at a tertiary children's hospital *BMJ Paediatrics Open* 2021;5:e001040. doi: [10.1136/bmjpo-2021-001040](https://doi.org/10.1136/bmjpo-2021-001040)

<sup>39</sup> Dennis Wormald, Andrew J. Lawrence, Gabrielle Carter, Andrew D. Fisher, Analysis of correlations between early social exposure and reported aggression in the dog, *Journal of Veterinary Behavior*, Volume 15, 2016, Pages 31-36, ISSN 1558-7878, <https://doi.org/10.1016/j.jveb.2016.08.071>.

# Future Legislative Discussions

## Importation rules should be reconsidered

We recommend discussion that import of dogs to the UK be halted, as fraudulent papers are often used to import banned dogs. In addition, fraudulent papers for dogs can also be taken advantage of by owners who crop their dogs' ears, claiming the procedure was done outside of the UK, due to its illegality within the UK.

As a work-around for dog importation, breeders have used international shipments of dog semen, including from banned breeds such as the APBT.<sup>40</sup> Therefore, import of dog semen should also be proscribed.

This follows legislative recommendations by Dave Martin from IVC Evidensia to reduce the serious dog welfare issues that ear cropping poses to British dogs<sup>41</sup>.

## Tighter Legislation around Dog-On-Dog Attacks

Under the Dangerous Dogs Act 1991<sup>42</sup> a dog-on-dog attack is not classed as a criminal offence and, therefore, there is no requirement under the National Crime Recording Standard (NCRS) for police forces to inform the Home Office. However many forces, such as the South Yorkshire Police Force (SYP), choose to do so internally as they view these attacks as an opportunity for early intervention.

A Dog Legislation Officer (DLO) for SYP told representatives of Protect Our Pets recently that, in the majority of fatalities, there were worrying incidents about the behaviour of the attacking dogs leading up to the fatality.<sup>43</sup>

In 2016 Nicky Morgan (MP for Loughborough at the time) submitted a FOI request to all 39 police forces in England. Only 14 held easily available data on this type of incident. In those 14 areas there were more than 1,700 reported dog-on-dog attacks.<sup>44</sup>

In 2023 Anna Firth (MP for Southend West) introduced a Bill, (informally known as Emilie's Law), to amend the Animal Welfare Act 2006 to require a person in charge of a dog to take

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<sup>40</sup> Diver, Tony. 2023, September 17. Pit bull semen from America used to breed XL Bullies in UK. The Telegraph. <https://www.telegraph.co.uk/world-news/2023/09/17/banned-pit-bulls-sold-as-semen-uk-breed-american-xl-bullies/>, 3 October 2023.

<sup>41</sup>

<https://www.veterinary-practice.com/2023/ivc-animal-welfare-advisor-call-ban-dogs-with-cropped-ears>

<sup>42</sup> Dangerous Dogs Act 1991, c. 65. Available at <https://www.legislation.gov.uk/ukpga/1991/65/introduction>. Accessed 8 October 2023.

<sup>43</sup> A Firth. Personal communication with Protect Our Pets. 15 August 2023.

<sup>44</sup> Morgan, N, 11 am 25 April 2017, "Comment on," UK Parliament, "Dog Attacks on Dogs. Volume 624: debated on Tuesday 25 April 2017," Hansard, UK Parliament, 25 April 2017, <https://hansard.parliament.uk/Commons/2017-04-25/debates/D6A76E12-A956-4F0A-81E8-87F8C8D535D0/DogAttacksOnDogs#contribution-F44D86EF-9BAC-470B-A97F-81C06AA50E6B>.

all reasonable steps to ensure that the dog does not fatally injure another dog.<sup>45</sup> Anna Firth MP submitted FOIs to the same 14 police forces and was shocked at the increase in attacks. In 2021 the total number of dog-on-dog attacks had shot up to 11,559 - a 700% increase - with a shocking 2,264 in London alone.<sup>46</sup>

The literature shows that fatalities could be reduced by early intervention. As described by Giovannini et al., “most fatal attacks involve young male dogs that have previously shown aggression or bitten someone. It is not uncommon that dog attacking humans had previously killed another dog or another animal”<sup>47</sup> We hope that, in view of this, either the NCRS could be amended so that all police forces are required to report dog-on-dog attacks or a separate national database be established.

Ideally, penalties for irresponsible owners should be re-assessed, as current perception is that even if longer sentences or increased penalties are available now, the legal requirements for those penalties are rarely met.<sup>48</sup>

Other changes that should be considered include enforcement of current breeding regulations and licensing. Whilst it would be advantageous for enforcement to consolidate existing legislation, the current issue of American Bully-type dogs in the UK takes precedence, and further improvements can be consolidated with existing laws in the future. This includes strengthening and combining laws regarding S1 type-based bans.

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<sup>45</sup> Stileman, S. (2023, May 10). *Conservative Animal Welfare Foundation Patron Anna Firth MP launches Emilie's Law*. Conservative Animal Welfare Foundation. Retrieved October 8, 2023, from <https://www.conservativeanimalwelfarefoundation.org/legislation-policy-bills/conservative-animal-welfare-foundation-patron-anna-firth-mp-launches-emilies-law/>.

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<sup>47</sup> Elena Giovannini, Mariana Roccaro, Angelo Peli, Simone Bianchini, Carla Bini, Susi Pelotti, Paolo Fais, Medico-legal implications of dog bite injuries: A systematic review, *Forensic Science International*, Volume 352, 2023, 111849, ISSN 0379-0738, <https://doi.org/10.1016/j.forsciint.2023.111849>.

<sup>48</sup> Hill, J. (2022, June 29). *Mum of boy, 10, killed by dog says she will fight owners' sentence*. WalesOnline. Retrieved October 8, 2023, from <https://www.walesonline.co.uk/news/wales-news/jack-lis-mum-says-not-24354027>.

# About Us

**Campaign for Evidence-Based Regulation of Dangerous Dogs** and **Protect Our Pets** have partnered to produce this update to our original report with **Bully Watch UK** to raise concerns about the significant increase in dog attacks and fatalities across the United Kingdom.

## **About the Campaign for Evidence-Based Regulation of Dangerous Dogs**

Founded by legal academics and policy experts, the Campaign for Evidence-Based Regulation of Dangerous Dogs is composed of policy experts, scientists and legal specialists, with an aim to improve the regulation and enforcement of laws on dangerous dogs, and to ban the American Bully. Away from regulatory focus, our aim is to provide credible expertise confronting the misinformation and fake science so often thrown about in the debate around breed specific legislation.

## **About Protect Our Pets UK**

Protect Our Pets is a victim support and campaigning group set up in 2018 for those who have had a dog killed or seriously injured in a dog on dog attack. Since inception it has supported more than 2,500 people through the traumatic experience of seeing a beloved pet attacked, often fatally. The trauma suffered by the dog and its owners cannot be underestimated with many people suffering PTSD for many years afterwards. People are also shocked to discover that a dog-on-dog attack is not a criminal offence. As well as supporting victims POP continues to campaign for effective regulation to protect companion dogs.